

## **Executive Summary**

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The Center for Business and Economic Research at the University of Kentucky (CBER), along with its partners, the Survey Research Center at the University of Kentucky (UK-SRC), the Survey Research Center in the Urban Studies Institute at the University of Louisville (UL-SRC), and the Department of Economics at the University of Louisville, is pleased to present this final report on the findings of the Kentucky labor supply and demand surveys sponsored by the Kentucky Cabinet for Workforce Development. The two universities have put together a consortium including some of the best scholars in the region in the areas of labor economics, local economic development, and survey design and administration.

The study consisted of several major activities:

- Design and implementation of a statewide household survey to obtain data on underemployment.
- Design and implementation of a statewide survey of businesses to obtain data on fringe benefits, labor shortages and vacancies, and educational credentials.
- Statistical estimation using survey data, Census 2000 data, and ES-202 data to provide local estimates of underemployment, fringe benefits, labor shortages and vacancies, and educational credentials.
- Development of a web application to make the data available to all interested users. The current address of the site is <http://kycwd.org/lmisurvey.htm>.
- Development of plans to update the data in the future and to work toward building the data delivery capacity of the Kentucky Cabinet for Workforce Development.

The household survey yielded 3,285 completions across five regions (large urban areas, small urban areas, exurban areas, rural Appalachia, and the rural west) in the state with a response rate of approximately 40% in each region. The business survey yielded 3,649 completions and a 27.8% response rate across two sub-samples: establishments with less than 50 employees and establishments with 50 or more employees. The industry make-ups of the two sub-samples were remarkably similar to the industry make-ups of the population of small and large Kentucky business establishments. These survey data and our statistical estimation provide estimates for the following geographic groups within each category of data:

1. Underemployment:

- Underemployment Population Counts: 10 Workforce Investment Areas (WIAs), 15 Area Development Districts (ADDs), 120 counties, 120 county groups (each county plus all of its surrounding counties)
- Characteristics of the Underemployed and the Employed but not Underemployed: 5 labor supply survey regions (large urban areas, small urban areas, exurban areas, rural Appalachia, rural west).

2. Fringe Benefits:

- Eight Fringe Benefit Measures (e.g., health insurance coverage, retirement plan coverage): 10 WIAs, 15 ADDs, 120 counties, 120 county groups, 19 industry groups
- Remaining Fringe Benefit Measures: 10 WIAs, 15 ADDs, 25 large counties, 120 county groups, 19 industry groups

3. Job Shortages and Vacancies:

- 11 WIAs, 15 ADDs, 25 large counties, 120 county groups, 19 industry groups

4. Educational Credentials:

- 11 WIAs, 15 ADDs, 25 large counties, 120 county groups, 19 industry groups

Some findings from our supply side survey and statistical estimation are:

- We find that there are almost 355,000 underemployed persons in the state and that underemployment as a percentage of the labor force varies across Area Development Districts from 17.5% in the KIPDA ADD (Louisville area) to 22.5% in the Gateway ADD in northeastern Kentucky. The percentage of persons in the labor force who are either underemployed or unemployed varies from 20.4% in the Northern Kentucky ADD to 32.0% in the Kentucky River ADD in southeastern Kentucky.
- The underemployed have less education, are younger, are less likely to be married, more likely to be non-white, more likely to report physical limitations, more likely to be working in manufacturing than other industries, more likely to be working for private for-profit employers, less likely to be working for government employers, less likely to be self employed, less likely to be working in management, more likely to be working in office and administrative support jobs and have lower pay on average than those not underemployed. Some of the most striking of these findings across the five labor supply survey regions are:

- In exurban areas, 31.15% of those not underemployed have a bachelor's degree or more compared to 7.55% of the underemployed.
  - In large urban areas, 63.58% of those not underemployed are married compared to 44.78% of the underemployed.
  - In small urban areas, 20.51% of the underemployed are non-white while 7.02% of those not underemployed are non-white.
  - In rural Appalachia, 16.67% of the underemployed report having a condition that limits physical activities, compared to 4.98% of those not underemployed.
  - In large urban areas, 22.39% of the underemployed work in manufacturing compared with 10.4% of those not underemployed and 73.13% of the underemployed work in private for-profit firms compared to 55.49% of those not underemployed.
  - In rural Appalachia, 14.56% of those not underemployed are self-employed, compared to 6.07% of the underemployed.
  - In large urban areas, 29.85% of the underemployed are working in office and administrative support jobs, compared with 13.45% of those not underemployed.
  - In small urban areas, 20.12% of those not underemployed are working in management, business or financial jobs compared with 8.98% of the underemployed.
  - In small urban areas, the average hourly rate of pay for those not underemployed is \$23.45 compared to \$9.68 for the underemployed.
- The underemployed workers are not uniformly low skilled. In large urban areas, 41.79% of the underemployed report having a bachelor's degree or more, 19.4% report that they are in management, business, or financial jobs, and their average hourly rate of pay is \$16.16. Further, the underemployed are in general more likely to be attending school than those not underemployed
  - 32% of the part-time workers in small urban areas and 40% of part-time workers in rural Appalachia would like to obtain full-time employment.
  - The rate at which full-time workers report that they are overqualified for their current job varies from 26.3% in the rural west to 33.8% in exurban areas. Of these workers, from 39.6% to 48.6% report that they are voluntarily overqualified.
  - While 58.5% to 74.0% of the underemployed believe that their skills and training fit well with their current job, 84.8% to 95.4% believe they should have a better job and 92.5% to 96.1% of them believe they are qualified for a better job.

- Only 41.5% to 55.3% of the underemployed believe that they are appropriately compensated in their current job. They believe that they could obtain large increases in pay if they were to obtain a job that better fit their qualifications. These beliefs about pay increases range from 26.7% in large urban areas to 63.0% in rural Appalachia.
- Many of the underemployed report that they have attempted to improve their skills and training, ranging from 58.9% in the rural west and to 67.2% in large urban areas. Only 25.4% of the underemployed in rural Appalachia have access to tuition reimbursement programs compared to 51.3% in small urban areas.
- Longer commutes or relocation may be another option for the underemployed. 59.4% to 73.4% of them believe that they could find a better job within three months if they were willing to commute or relocate within 200 miles of their current residence.

From our demand side survey and statistical estimation we find:

- Health insurance availability varies significantly across regions of the state and by establishment size. For hourly workers in establishments with less than 50 employees, 59.4% are offered health insurance in the Buffalo Trace ADD in northeastern Kentucky while in the FIVCO ADD (Ashland area), 78.4% are offered health insurance. In establishments with 50 or more workers in these same ADDs, coverage rates are 92.9% (Buffalo Trace) and 91.2% (FIVCO). There is also significant variation in the availability of retirement plans across regions of the state and by establishment size.
- Our demand side survey asked employers to list high demand or difficult to fill jobs in their businesses. Jobs in high demand or difficult to fill vary significantly across regions of the state. Within the lists of the top 10 jobs by ADD and WIA, both high skill jobs such as in the health industry and low skill retail and restaurant jobs are represented.
- The percentage of jobs that are in high demand or are difficult to fill that require at least a bachelor's degree is typically higher than the percentage of Kentucky adults with a bachelor's degree. At the same time, the percentage of high demand or difficult to fill jobs that require a high school degree or less is typically also higher than the percentage of Kentucky adults with a high school degree or less. The percentage of high demand or difficult to fill jobs that require some college, an associate degree, or a postsecondary vocational qualification, while less than the Kentucky percentage of adults with this

qualification, is greater than the percentage of job openings nationally that require these qualifications.

We have developed plans for updating our estimates using combinations of existing data sets, surveys already scheduled at the national and state level for other purposes, updated versions of our household and business surveys, and current and updated versions of our statistical models.

Most important, these data will have several significant uses. Economic development efforts will be enhanced as potential new employers in the Commonwealth will be able to obtain information about labor market conditions in the area in which they are contemplating locating. More specifically, these businesses will have estimates of the number of underemployed workers in the region that might be available for work if they were able to obtain a more suitable match with their skills. They will also know which occupations are in high demand or are difficult to fill in the region. Potential new employers and existing employers will have information on fringe benefit packages in the region so they can determine whether they are offering a competitive compensation package. These new data will provide a more complete picture of the total compensation of workers and labor market conditions in Kentucky than has been available previously.